

Basis for Amendments to Claims

Applicants have amended Claims 1 and 34. Claim 1 has been amended by incorporating the claim limitations of prior Claims 4 and 6 into Claim 1. Applicants have amended Claim 34 by incorporating the limitations of Claims 12, 13 and 14 into Claim 34. Minor amendments were also made to other claims to correct claim dependency.

The additional claim limitations added to Claim 1 are also shown in Figure 4 of the Application. The additional claim limitations added to Claim 34 are also shown in Figure 4 and particularly in Figure 9 of the Application.

No new subject matter is introduced by these amendments, as the additional limitations, which are added to independent Claims 1 and 34, were contained in dependent claims already present in earlier claims of the Application.

Claim Rejections Based on Hekal in view of Simpson, et al.

In the Office Action of the United States Patent and Trademark Office dated May 8, 2009, the USPTO finally rejected substantially all of the claims of the Application as being unpatentable over Hekal (EP 0 824 480) in view of Simpson, et al., U.S. Patent No. 6,000,550. Certain claims of the Application were also rejected over Hekal in view of Simpson, et al. and further in view of Taskis, et al., U.S. Patent No. 5,947,274. Applicants respectfully traverse these rejections.

The Invention

The invention is a unique container that can be closed with particular tightness with respect to moisture. The container is designed for the packaging of products sensitive to ambient moisture. The container utilizes a unique sealing system to seal the cap lid to the tubular casing. The unique sealing system creates at least four tightness barriers that are formed between the cap lid and the tubular casing. This level of tightness is unique and results from the specific structure of Applicants' container, which structure is not disclosed by the prior art.

To enhance this tight seal between the tubular casing and the cap, the cap lid contains a unique structure which is claimed in the claims of the application, as amended. In addition, based on this unique structure, the lid, which is

separately formed, can easily be brought into position for securing to the tubular casing by a simple vertical movement, i.e. by simple movement in a longitudinal direction of the tubular casing. This easy system for joining the cap to the tubular casing is unique and is not disclosed by the prior art and is not obvious from the structure disclosed in the cited prior art.

Discussion of EP 0 824 480 in view of Simpson, et al.

The primary reference cited against the patentability of the claims of the Application is EP 0 824 480. The scope and focus of EP 0 824 480 are distinct from that of Applicants' claimed container. The disclosure of EP 0 824 480 is focused on the composition of the container and not its structure. Note throughout the specification of EP 0 824 480 the failure to even describe the precise structure of the components of his container.

In the Office Action the USPTO asserted that the structure of the sealing means, as claimed by Applicants, is disclosed by EP 0 824 480. The Office Action specifically references a disclosure of an inner wall 74, outer wall 87, and other features of the container that are disclosed in the figures attached to EP 0 824 480. However, the written specification of EP 0 824 480 fails to describe the structure, purpose or operation of these components. The disclosures made by Figure 1

of EP 0 824 480 may suggest certain structural features that might be useful for the forming of a container. However, the written specification fails to describe with clarity and the required specificity the exact structure that is claimed by the container of Figure 1. In fact, the written specification of EP 0 824 480 is silent as to many of the features that are shown in the drawings attached thereto. A person skilled in the art would not be taught by EP 0 824 480 to produce a container with the features specifically claimed by Applicants.

In response to this assertion the USPTO argues that the exact structure of the claimed device is shown in Figure 1 of EP 0 824 480. Applicants respectfully assert that several elements of the claimed device, notably the requirement of four separate tightness barriers that are formed between the cap lid and the tubular casing, are neither disclosed, taught nor suggested by EP 0 824 480. Rather, EP 0 824 480 merely discloses a generic cap and lid system. Applicants respectfully assert that the specific design of Applicants' cap and lid system, as claimed, is distinct from that of EP 0 824 480.

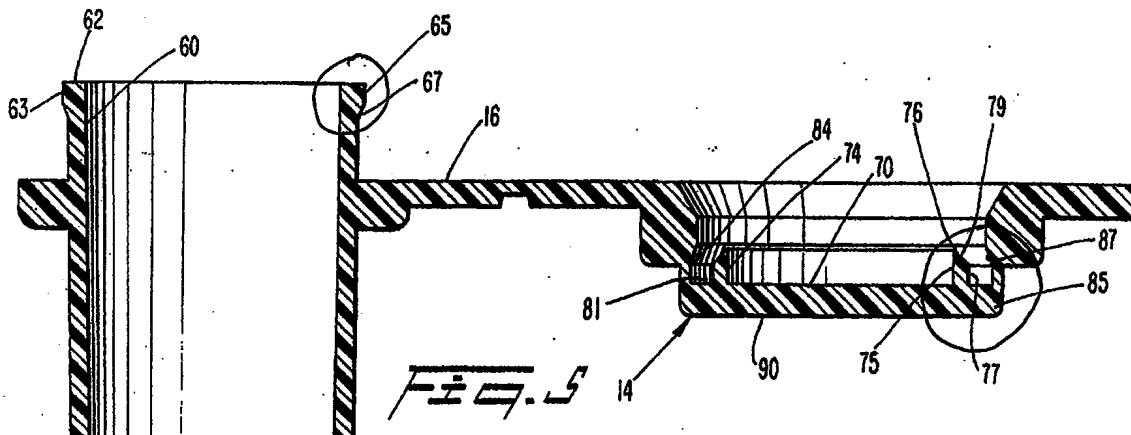
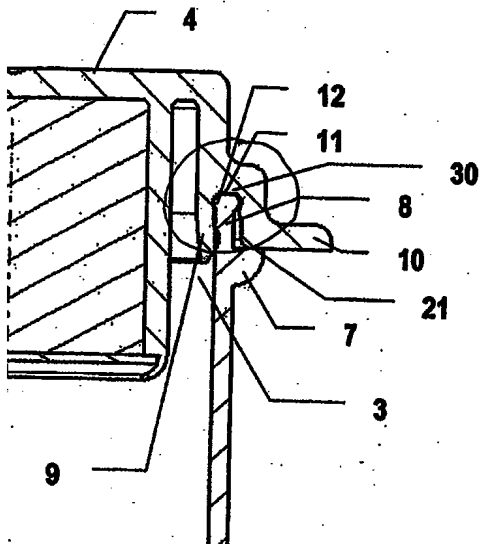
To overcome the specific rejections of the USPTO and to focus on distinctive elements of Applicants' invention, Applicants have amended independent Claims 1 and 34 to emphasize particular distinctions between Applicants' invention and that of the references cited, particularly EP 0 824 480.

With regard to Claim 1, Applicants have incorporated the claim limitations of Claims 4 and 6 into Claim 1 and cancelled Claim 5. In Applicants' invention, as best shown in Figure 4, the tip of casing (8) has a circular inside portion and outside portion which corresponds perfectly with a circular end of the slot in the cap, shown at elements 11 and 12 on the right side of on Figure 4.

"In fact, according to the invention, the base of the peripheral groove 11 has the same cross-section as the peripheral edge 30 of the open end of the tubular casing 1, which in this case is a section in the form of an arc of a circle protruding laterally with respect to the open end of the tubular casing: in this way, the cross-section of the groove base is perfectly adapted to the cross-section of the peripheral edge 30." (See Application, page 26, lines 16 - 23.)

In contrast, in Figure 1 of EP 0 824 480, the tip of the casing at elements 62 and 65 forms a perpendicular angle at its distal tip which corresponds with a perpendicular inside surface of the small slot between the inner wall (79) and the outer wall (87) of the cap. A better view of this precise structure is contained in Figure 5 of U.S. Patent No. 4,783,056, the reference cited in EP 0 824 480 at Col. 4, lines 12 - 20 as the source for this Figure 1 of EP 0 824 480. Thus, the structure of the device of the Application, as claimed, is clearly distinctive from that of EP 0 824 480. A comparison of the difference between these two structures, one in the Application and one in Figure 5 of U.S. Patent No. 4,783,056,

is shown below for comparison:



The importance of this structural distinction is that by use of the circular peripheral edges at the tip of the casing and also at the end of the slot (11, 12), as shown on Figure 4, a better seal is formed between the casing and the cap lid when the cap lid is secured within the slot than is possible with the device of Figure 1, which utilizes perpendicular edges for

the slot in the cap and the tip of the casing. Note that Applicants recognized the importance of this distinction by stating that because of this structure, "the cross-section of the groove base is perfectly adopted to the cross-section of the peripheral edge 30." (Page 26, lines 16 - 23.) Thus, the structure of Applicants' device is clearly distinctive from what is shown in Figure 1 of EP 0 824 480.

With regard to Claim 12, the USPTO asserted that "Hekal teaches the height of the inner wall of the groove is at least equal to the height of the outer wall of the groove." In fact, the inner wall, marked by element 77 on Figure 1 of EP 0 824 480, is significantly shorter than the outer wall, marked by element 87 on Figure 1, which extends from the bottom of the groove to the top surface of the cap. In contrast, the inner wall (9) of the slot, as shown in Figure 4, is actually longer than the outer wall (10), as shown in Figure 4. This structural arrangement is also helpful in permitting the peripheral edge of the casing to be inserted into the slot of the cap lid of Applicants' device and thereby assists in providing a better seal between the cap and the casing. In contrast, it is difficult, because of the shortness of the inner wall (79), for the tip (65) of the casing to fit into the slot marked by element (77) in Figure 1 of EP 0 824 480. Thus, Applicants' device is designed to form a better seal between the cap lid

and the casing than is permitted by the structure of the device of EP 0 824 480.

Important distinctions also exist between the device of Claim 34, as amended, and of EP 0 824 480. Amended Claim 34 adds the limitation of a presence of an annular peripheral protuberance operating in conjunction with a peripheral groove placed on the inner wall of the second end of the casing. These features are best shown in Figure 4, and particularly in Figure 9, where these two elements are marked with numerals 31 and 32.

In response to this claim limitation, the USPTO acknowledged that these elements are not taught by the references, as cited. Notwithstanding, the USPTO asserted that it would have been obvious to add these elements to the invention. In fact, the addition of these elements is merely one of several elements added to the structure to increase the capability of the structure to form a tight seal between the cap lid and the casing, which elements are not disclosed by EP 0 824 480 in view of Simpson, et al. Applicants also assert that the addition of these elements is not an obvious modification.

In addition, Applicants have added the claim limitations of Claim 12 to Claim 34 to further distinguish Applicants' invention from the cited prior art. A discussion of the limitations of Claim 12 is provided in the discussion of Claim

12 on page 14 above.

Applicants also respectfully assert that the hinge portion of Applicants' claimed container is entirely distinct from what is disclosed by Simpson, et al. in combination with EP 0 824 480. Clearly the hinge system disclosed by EP 0 824 480 is entirely different from that of Applicants' invention. The hinge system of EP 0 824 480 merely comprises a one-part molding of a combination of a cap and a tubular container and does not utilize the two-part system disclosed in either Simpson, et al. or Applicants' invention. Further, there is no suggestion that the hinge system of EP 0 824 480 should be modified to utilize the two part system that is disclosed by Applicants' invention. In fact, the use of a two-part system contrasts significantly with the one part system of EP 0 824 480. Thus, the teachings of EP 0 824 480 teach away from the use of the two part system of Simpson, et al.

In addition, the hinge system of Applicants, as claimed, is different from that disclosed by Simpson, et al. For example, Simpson, et al. require the presence of channels (48 and 50) for receiving portions (36, 38) of the arms (32, 34) of the hinges. No such channels exist in Applicants' invention. Applicants have discovered a better system, which is easier to assemble and easier to produce utilizing end sections (19) which snap into orifices (18) to secure the cap to the tubular

casing.

This structural distinction is important and not merely decorative. It performs a substantive function. In order for the cap of the box of Simpson, et al. to be secured to the bottom of the box requires placement of the cap (10) in relation to the bottom (30) in a very specific position, as shown in Figure 1A. In no other position can these two components be joined together to form the box because of the need to line up the channels in a specific orientation. This is a complicated and time consuming methodology made difficult by the structure of the hinge system of Simpson, et al.

In contrast, in order to mount the lid to the container body of Applicants' invention, a simple vertical movement of the cap onto the tubular casing is all that is required.

In addition, Simpson, et al. also utilize a camming surface (70), which is required to be flat and smooth and located a specific and precise distance away from the lid in order for the cap to be secured to the bottom of the container. Without the specific and precise location of the camming surface (70), the cap can not be joined with the bottom portion of the container. No such camming surface is an element of, nor is it required by, Applicants' invention. Thus, this feature further distinguishes Applicants' invention and makes it simpler to operate than the system designed by Simpson, et al.

Finally, the location and shape of the system of the cap and housing of Simpson, et al. is actually the opposite of what is shown for Applicants' invention. This choice of structure is also not merely a matter of style but has substantive significance because the system designed by Applicants for the joining of the cap with the tubular casing is quite easy to assemble and operate.

The USPTO has previously determined that obviousness is not proven when the primary prior art teaches away from the secondary art that has been combined therewith. In making this determination, the USPTO recognized the obviousness rational which was adopted by KSR Int'l Co. v. Teleflex, Inc., 127 S.Ct. 1727, 1741 (2007). KRS noted that obviousness can not be proven merely by showing that the elements of the claimed device were simply known in the prior art. Rather, as stated by the USPTO in Ex Parte Whalen, 89 USPQ 2d 1078, 1084 (2008),

...it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed".

Ex Parte Whelan further states that,

...obviousness can not be proven merely by showing that a known composition could have been modified by routine experimentation or solely on the expectation of success; it must be shown that those of ordinary skill in the art

would have some apparent reason to modify the known composition in a way that would result in the claimed composition.

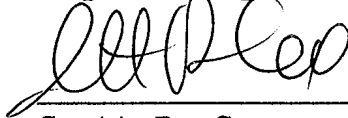
It is clear that no "apparent reason" exists for modifying the simple, mass produced, single injection molded hinge that was disclosed by EP 0 824 480 with the totally unrelated, multicomponent hinge that is disclosed by Simpson, et al. In fact, EP 0 824 480 teaches that the use of a simple hinge is preferable because all components of its system are required to be made of the same material and produced by a single injection molding process. (See paragraph 0011 of EP 0 824 480.) Further, because all components of the container of EP 0 824 480 are formed from this same desiccant entrained thermoplastic material, it is critical that the container be produced in a one step injection molded system. Thus, a person skilled in the art reviewing EP 0 824 480 would not be taught to even consider use of a hinge systems formed of two separate components, such as is necessary to produce the more complicated hinge structure that is disclosed by Simpson, et al.

Finally, the addition of Taskis, et al. to support the rejection of Claim 32 and 33 is not material as Taskis, et al. fail to overcome the deficiencies in the disclosure of EP 0 824 480 and Simpson, et al.

CONCLUSION

Applicants believe that the claims, as amended, are distinctive over the cited prior art, particularly as amended and request review and allowance by the USPTO. If there are any questions, please contact Applicants' counsel.

Respectfully submitted,



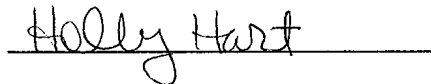
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CERTIFICATE OF EFS SUBMISSION (37 C.F.R. § 1.8(a)(i)(1)(C))

I hereby certify that, on the date shown below, this correspondence is being submitted to the Patent and Trademark Office via the Office Electronic Filing System in accordance with § 1.6(a)(4).

Date: October 8, 2009



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